

Research-data  
B No. 10 (c)

Investigation on the rearing cost of  
children  
—On the result of 3rd survey—

by

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## I Preface

This investigation has been done about principal prefectures for a month of November in 1944, and the objects are about 1,300 families of the middle school teachers with children less than 17 years old except any lodger. The purpose is to observe the relation between child maintenance and livelihood standard.

## II The Expenses by the age of children

The family with a child is arranged and collected on the Table by their distinctive age.

1) The changes of the rear expense of each age between zero to seventeen are the following:—

Table I: The rear expense of each age (unit yen)

Age	Milk Expen- cive	Eating between meals expense	Toy Ex- pense	Sani- tary Ex- pense	Medi- cal Ex- pense	Cloth- ing Ex- pense	Neces- saries Ex- pense	Fee of Educa- tion	Others	Total
0	5.47	2.25	1.28	2.26	5.10	11.44	3.32	0.09	0.16	30.27
1	2.79	3.04	2.30	5.05	4.67	5.93	2.72	0.23	0.04	22.78
2	2.01	4.50	2.51	1.62	5.83	5.39	2.84	0.41	0.39	25.51
3	1.68	4.67	3.00	1.55	7.74	7.42	5.05	0.25	0.66	30.83
4	1.67	3.78	2.71	1.33	1.78	3.20	2.92	3.76	-	21.14
5	1.81	7.31	1.68	0.99	0.88	1.50	1.04	2.12	0.50	17.87
6	3.44	5.48	2.13	2.95	12.37	5.66	4.13	4.25	-	40.42
7	1.58	4.08	0.40	0.91	3.07	6.18	1.61	2.14	-	19.96
8	-	3.85	0.53	2.11	3.14	4.50	2.23	4.65	0.54	21.53
9	1.52	9.76	0.57	0.82	1.12	0.60	1.78	0.72	0.59	17.47
10	0.87	3.28	0.44	1.30	6.71	5.78	2.62	1.59	-	22.59
11	0.47	2.69	0.32	0.94	0.38	-	3.59	2.50	0.01	10.54
12	0.96	1.69	0.56	1.70	1.59	8.87	3.33	8.36	3.09	31.50
13	0.80	1.40	0.20	3.02	1.38	7.83	2.52	8.77	2.70	28.63

14	4.00	4.05	-	4.48	4.43	7.72	3.48	17.38	2.53	48.08
15	0.64	4.06	-	0.52	3.36	5.50	13.22	8.44	1.59	37.55
16	0.18	1.67	-	1.87	0.99	42.31	12.15	6.75	1.25	67.55
17	0.20	0.20	0.20	1.95	5.60	12.47	8.55	30.30	2.60	62.06

Next, let us arrange more socially in the group of baby (0 year), infant (1 - 5), school-children (6 - 12) and students (13 - 17).

Table II: Expense for Children distinguished in Babies, Infants School-children and Students (Unit yen): -

	Milk Exp.	Eat- ing be- tween Meals	Toy Exp.	Sani- tary Exp.	Meci- cal Exp.	Cloth- ing Exp.	Nece- ssari- es Exp.	Fee of Edu- cation	Others	Total
(Mas. 0)	5.48	0.71	2.44	1.16	9.92	12.05	3.27	-	-	35.13
(Fem. 0)	4.35	3.51	0.24	3.15	1.17	11.15	3.36	0.17	0.30	26.31
(Aver. 0)	5.47	2.25	1.28	2.26	5.10	11.44	3.32	0.09	0.16	30.27
1-(Mas. 1)	1.78	2.72	2.30	1.35	5.07	3.35	2.03	0.29	0.03	18.94
5 (Fem. 1)	2.54	5.11	2.59	1.27	4.72	7.67	3.98	1.24	0.43	29.55
(Aver. 1)	2.15	3.90	2.44	1.31	4.90	5.47	2.99	0.76	0.23	24.15
6-(Mas. 2)	1.78	3.83	1.15	1.68	6.22	5.25	3.14	3.77	0.22	27.38
12(Fem. 2)	0.64	4.77	0.22	1.67	2.77	4.92	2.32	3.15	1.12	21.55
(Aver. 2)	1.33	4.21	0.78	1.67	4.84	5.12	2.82	3.66	0.65	25.05
13-(Mas. 3)	1.37	2.61	0.07	2.61	2.85	7.15	6.02	11.62	2.85	40.84
17(Fem. 3)	0.19	1.77	0.09	2.04	3.27	28.15	12.82	13.89	0.77	56.16
(Aver. 3)	0.87	2.25	0.08	2.04	3.03	17.65	8.89	12.76	2.03	48.60

The upper Table does not contain expense for children's food, and if it would be added by estimation, the total sum of rearing cost of children is as follows.

Table III: The Total Expense for Children (unit yen)

Age	Pure Ex- pense for Children	Family Expense	Ratio of Child to family in Quet	Food Expense of Children	Total Expense for Children
0	30.27	-	-	-	30.27
1	22.78	42.63	1.1 / 7.6	6.17	28.95
2	25.51	50.17	1.2 / 7.7	7.82	33.33
3	30.83	56.65	1.3 / 7.8	9.44	40.27
4	21.14	47.45	1.4 / 7.9	8.41	29.55
5	17.87	46.37	1.5 / 8.0	8.81	26.68
6	40.42	60.86	1.6 / 8.1	12.02	52.44
7	19.96	57.77	1.7 / 8.2	12.00	31.96
8	21.53	40.62	1.8 / 8.3	8.81	30.34
9	17.47	64.26	1.9 / 8.4	14.52	31.99
10	22.59	29.91	2.0 / 8.5	7.04	29.63
11	10.54	53.65	2.1 / 8.6	13.10	23.64
12	31.50	51.99	2.2 / 8.7	13.14	44.64
13	28.63	48.55	2.3 / 8.8	12.69	41.32
14	48.08	73.07	2.4 / 8.9	19.92	68.00
15	37.55	37.44	2.5 / 9.0	10.40	47.95
16	67.27	59.77	2.6 / 9.1	17.07	84.24
17	62.06	35.30	2.7 / 9.2	10.36	72.42

In conclusion the following equation is gained by the line of regression of age (X) and total expense for children.

$$Y = 0.72 + 0.074 x$$

2) The relation between expense for children and total expense and income.

At first the relation between family income and total expense is as follows: -

Table 4: Total Expense and Family Income  
(unit Yen)

Age	Family Income	Total Expense
0	144.17	137.57
1	143.43	128.00
2	162.88	133.91
3	219.99	177.61
4	170.33	123.63
5	153.53	126.59
6	201.57	177.76
7	187.64	110.44
8	208.88	122.29
9	122.75	122.45
10	162.84	105.31
11	287.70	150.60
12	167.81	144.28
13	202.10	142.49
14	196.25	203.09
15	160.40	168.97
16	215.53	242.08
17	241.40	230.49
none child	186.01	135.72

Infant, School-Children and Students Expense in Family are following:--  
 Table 5: Expense for Babies, Infants & School-Children in Family:

Age	Parents' Food Expense	Dwelling Expense	Heating Expense	Clothing Expense	Others	Total	Expense Children	Total
0	34.8	14.2	8.2	17.6	3.4	78.0	22.0	100.0
1 - 5	29.0	14.0	8.7	13.2	11.5	76.4	23.6	100.0
6 - 12	28.2	13.5	7.7	11.3	12.5	73.2	26.8	100.0
13- 17	18.2	11.0	6.8	17.1	15.4	68.3	31.7	100.0
non child	23.3	14.6	9.8	10.1	33.2	-	-	100.0
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average	-	-	-	-	-	75.0	25.0	0.0

The line of regression of the total expense shows the following equation: ---

$$Z = 0.81 + 0.0325 x \text{ (z = the total expense)}$$

and the equation of the income (E) : -

$$E = 1.08 + 0.22 x$$

In conclusion an infant can grow up without declining living standard within the income standard of this class; and then the more increase the age of the child, the less becomes the family living standard, and when the child reaches the age of 17 the expense is equal to the family income.

### III Expenses by the number of children.

#### 1) The distribution of family with children.

Table I: The number of Family (with different number of children)

Family with:	Total	Six Great Cities	Cities	Town
0 child	133	18	54	61
1 "	243	25	98	120
2 children	273	25	121	127
3 "	297	17	137	143
4 "	185	17	77	91
5 "	111	17	39	55
6 and over	50	4	20	26
Total	1292	123	546	623

2) The Pure Expense for the number of children.

Table II, (1)

The pure expense for the number of children(unit yen)

family	average	six great cities	cities	town
with				
1 child	30.02	29.28	31.53	28.95
2 children	39.80	52.34	39.00	38.09
3 "	45.32	55.40	43.85	45.53
4 "	52.99	67.50	49.84	52.95
5 "	73.14	103.08	68.11	67.44
6 and over	80.81	103.57	86.18	73.19
average	46.23	59.97	44.78	44.93

index number, one child family as 100.



1 child	100	100	100	100
2 children	132	178	127	131
3 "	151	188	139	157
4 "	176	230	159	182
5 "	264	352	216	233
6 and over	269	354	270	252

Table II, (2). The Pure Expense per a Child (unit yen)

Family	Average	Six Great Cities	City	Town
1 child	30.32	29.28	31.53	28.95
2 children	19.90	26.17	19.50	19.64
3 "	15.61	18.47	14.61	15.18
4 "	13.25	16.87	12.46	13.24
5 "	14.65	20.62	13.62	13.49
6 and over	13.47	17.26	14.36	12.20

Index number, one child family as 100.

1 child	100	100	100	100
2 children	66	89	61	66
3	50	62	45	52
4	44	55	40	46
5	49	69	42	47
6 and over	45	59	45	42

The average increase is about ten yen per child, and in the six greatest cities it is about fifteen yen.

According to Table II, (1), the increasing rate per one is following: ---

Average:	0.36	City:	0.32
Six Great Cities:	0.53	Town:	0.31

3) The Necessary Expenditure & other Expenditure

(a) The Necessary Expenditure is shown in the following table (Unit Yen):-

Table III (1)

Family with:	Average	Six Great cities	City	Town
0 child	89.87	102.33	99.54	77.64
1 Children	99.31	119.93	100.86	93.75
2 "	113.63	121.89	115.96	109.82
3 "	119.69	136.23	118.05	119.27
4 "	131.88	159.15	128.72	130.90
5 "	152.90	180.97	144.82	149.95
6 and over	141.04	124.04	147.90	138.35
Average	120.14	133.96	117.18	113.56
Percentage of the necessary expenditure to the total expense.				
0 child	66.13	65.47	66.51	65.99
1 "	63.10	64.81	63.77	62.14
2 children	62.43	59.36	63.87	61.73
3 "	61.55	63.08	62.89	60.15
4 "	61.30	62.31	61.01	61.32
5 "	59.25	57.95	59.95	59.28
6 and over	54.31	48.19	55.29	54.49
Average	61.26	61.21	62.55	60.89

Table III (2) The Necessary Expenditure per family member (Unit Yen)

Family with:	Average	Six Great cities	City	Town
0 child	44.93	51.16	47.77	38.82
1 "	33.10	39.98	33.62	31.25
2 children	28.41	30.42	28.99	27.45
3 "	23.94	27.25	23.61	23.85
4 "	21.98	26.53	21.45	21.81
5 "	21.84	25.85	20.69	21.42
6 and over	17.63	15.51	18.49	17.29
Standard index, one child family as 100.				
1 child	100	100	100	100
2 children	86	76	86	88
3 "	73	68	71	76
4 "	67	66	64	70
5 "	66	65	61	68
6 and over	54	39	55	55

According to the table, the absolute number in creases while the relative one decreases and that is remarkable in the 6 big cities:

(b) Other Expenditure:-

Table IV The Expenditure per family member (Unit: Yen)

Family with:	Average	Six Great cities	City	Town
0 child	23.00	26.98	25.06	20.01
1 "	9.35	11.95	8.59	9.43
2 children	7.14	7.75	6.65	7.49
3 "	5.88	4.87	5.16	6.70
4 "	5.11	4.80	5.57	4.93
6 and over	4.73	3.72	4.18	4.05
Average				

	Standard Index, one child family as 100.			
1 child	100	100		100
2 children	76	65	77	79
3 "	63	40	60	71
4 "	54	40	64	52
5 "	49	34	47	64
6 and over	49	31	48	48

In this case both the real number and the index number decrease but observing the number per one in a family the difference between regions is remarkable.

C) The Total Expense: --

Table V, (1) The Total Expense (unit yen)

Family	Average	Six Greatest Cities	City	Town
Non Child	135.88	156.30	149.67	117.66
1 "	157.38	185.05	158.17	150.98
2 "	182.01	205.62	181.57	177.90
3 "	194.43	215.96	187.71	198.30
4 "		255.42		
5 "	215.57	312.25	210.98	213.45
6 and over	258.06	257.42	241.57	252.99
	259.64		267.52	253.91

Table V, (2) The Total Expense per Family member (unit yen)

Family with:	Average	Six Greatest Cities	City	Town
0 Child	67.94	78.15	74.83	58.83
1 "	52.46	61.68	52.72	50.33
2 "	45.50	51.25	45.38	44.48
3 "	38.89	43.19	37.54	39.66
4 "	35.93	42.58	35.16	35.57
5 "	36.87	41.61	34.51	36.14
6 and over	32.26	32.18	33.44	31.74

Standard index one child family as 100

1 Child	100	100	100	100
2 Children	86	83	87	86
3 "	74	70	71	78
4 "	68	67	66	70
5 "	70	72	65	71
6 and over	61	52	65	61

4) Income

Table VI: The Income per Family members (unit yen)

family with:	Average	Six great Cities	City	Town
0 Child	77.84	90.73	78.62	73.34
1 "	56.47	61.07	52.49	54.59
2 children	45.74	54.10	43.93	45.81
3 "	38.69	41.75	38.97	38.06
4 "	33.82	40.52	33.76	32.61
5 "	31.46	34.75	32.40	29.78
6 and over	27.40	28.61	28.76	25.99

Index number, one child family as 600

1 Child	100	100	100	100
2 children	81	67	83	83
3 "	68	51	74	69
4 "	60	50	64	60
5 "	56	43	62	54
6 and over	48	35	55	47

According to the above table, the increasing-rate of income per child and that of the total expense is following: --

	Income	Total Expense
Average	0.07	0.15
Six Great Cities	0.004	0.11
City	0.096	0.14
Town	0.052	0.13

## 5) Conclusion

The average of these expenses is, in general, a family with three children; but in the greatest cities it is with two children. To the family, with more than two or three children the declining of living standard is seen by the successive increasing of expense for children.

Generally in this professional class the responsibility for bringing up children is high, while the increasing of income is limited; therefore the number of children is inverse proportion to the income and the responsibility. This is especially said in the six greatest cities, and the former distribution of different regions (Table I) is explained by this reason.